

# Case Study: Colorado's success in promoting and expanding coverage for the National Diabetes Prevention Program

States can prevent costly and devastating diseases by helping people who have prediabetes avoid type 2 diabetes. CDC-recognized lifestyle change programs operating under the framework of the National Diabetes Prevention Program (National DPP) prevent or delay the onset of type 2 diabetes and reduce the risk of heart disease and stroke among people with prediabetes. The Colorado experience highlighted below shows how state officials can support the growth and sustainability of the National DPP.

## Prediabetes—the Problem

Prediabetes—a condition in which individuals have blood glucose levels higher than normal, but not high enough to be classified as diabetes—increases the risk of developing type 2 diabetes, heart disease, and stroke.<sup>1</sup>

- An estimated 86 million American adults—more than 1 out of 3—have prediabetes.<sup>2</sup>
- Most people with prediabetes—9 out of 10 people—don't know they have prediabetes.<sup>3</sup>
- People with prediabetes have about 5 times the rate of developing diabetes than people with normal glucose.<sup>4</sup>

## The National Diabetes Prevention Program — The Solution

Research shows structured lifestyle interventions can cut the risk of type 2 diabetes in half.<sup>5</sup> The Centers for Disease Control and Prevention (CDC) established the National DPP to support a network of structured lifestyle-change programs for people with prediabetes in community-based settings and through virtual technology across the United States.<sup>6</sup> Over the course of 1 year, participants work with a lifestyle coach in a group or virtual setting to self-monitor their weight, diet, and physical activity and learn strategies to eat well, exercise, and reduce stress.<sup>6</sup> There are 16 intensive sessions held once a week during the first phase of the program followed by at least 6 sessions held once a month at an estimated cost of about \$500 per participant.<sup>7</sup> Participants experience about 5% body weight loss on average and improvements in blood glucose, A1c, blood pressure, and cholesterol.<sup>8</sup>

## The National DPP in Colorado

In Colorado, approximately 7.4% of the population has diabetes costing the state approximately \$2.52 billion.<sup>9</sup> One of 3 Coloradans have prediabetes—accounting for 35% of all Colorado adults. Yet only 6% of Coloradan adults know they have prediabetes.<sup>10</sup>

Beginning in January 2010, the diabetes program manager at Colorado's Department of Public Health and Environment (CDPHE) became interested in addressing prediabetes. At that same time, the YMCA in Denver was selected as a Y-DPP site and began providing classes to residents in the Denver metro area. Over the next couple of years, CDPHE:

- Handpicked a Colorado diabetes prevention advisory group that included the Denver Metro YMCA CEO, Colorado's American Diabetes Association (ADA) director, a representative from Kaiser Permanente, and the 9Healthfair vice president.
- Developed a 5-year action plan for scaling and sustaining the National DPP following a technical assistance visit by the National Association of Chronic Disease Directors (NACDD) and CDC.
- Worked with the governor's office to recommend the National DPP as a focus area during the National Governor's Association meeting, which was cohosted by Colorado in 2012.<sup>11</sup>



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## Raising awareness of prediabetes

The CDPHE launched a 2-month prediabetes and National DPP awareness campaign in 2013 and a 3-month continuation of that campaign in 2014 that helped Coloradans recognize if they were at risk for prediabetes, offered the evidence-based lifestyle change program as a solution, and prompted them to call the ADA hotline (1-800-DIABETES). The campaign included 15- and 30-second TV spots, social media postings, outdoor ads, and a prediabetes landing page on the CBS4 Denver website. All media content was in English and Spanish.

# 1.3 Million

the number of Colorado adults reached with prediabetes messages, resulting in a 7%-9% increase in awareness of prediabetes.

## Ensuring people with prediabetes are screened, identified, and referred:

In concert with the awareness campaign, the CDPHE established a network of referral avenues to CDC-recognized lifestyle change programs. This includes



*Self-referral:* The ADA agreed to incorporate the evidence-based lifestyle change program in their hotline (1-800-DIABETES) and refer Colorado callers to CDC-recognized program delivery sites.



*Health Care Provider Referral:* CDPHE partnered with Health TeamWorks, a quality improvement organization, to establish a provider-initiated referral system for patients with prediabetes.



*Employer referral:* CDPHE raised awareness among employers to encourage referrals among employees through a partnership with the Colorado Business Group on Health.

## Establishing a network of trained and recognized service providers:

The CDPHE developed a multitude of resources and training opportunities for community-based organizations (CBOs) interested in becoming CDC-recognized lifestyle change program providers including a step-by-step toolkit, a communications guide, and access to a learning community for lifestyle coaches. These steps led to the creation of 3 master trainers and the recognition of community-based institutions, such as local YMCAs, local ADA chapters, Denver Health, and the Center for African American Health to provide the lifestyle change program throughout the state.

## Covering the National DPP as a benefit:

The CDPHE added the National DPP as a covered health benefit for state employees by partnering with a diverse coalition of internal and external partners and capitalizing on opportunities to increase coverage. For example, the CDPHE

- Offered the lifestyle change program through a demonstration project for state employees with the participation of the chief medical officer of the health department.
- Presented to key government decision makers on how diabetes prevention was aligned with the goals of chronic disease prevention for the state's workforce.
- Worked with UnitedHealthcare and the Diabetes Prevention and Control Alliance—early champions of National DPP coverage—to expand coverage of the program to Kaiser Permanente.
- Secured agreements with both state health plans (Kaiser Permanente and UnitedHealth Care) to offer the benefit to satisfy the requirements specified by the state's personnel administration.

# 34,321

the number of state employees that are eligible for the benefit.



*Dr. Larry Wolk, Executive Director and Chief Medical Officer of CDPHE, participating in a state employee prediabetes screening event*

## Ingredients for Success - Several key features of the National DPP program in Colorado contributed to its success.

- **Establishing a diverse coalition of internal and external partners:** The Department of Health-care Policy and Financing, the Governor's Office on Policy and Research, the state wellness coordinator, the Department of Personnel Administration (DPA), the ADA, Kaiser Permanente, UnitedHealthcare, the Colorado Business Group on Health, the Colorado Prevention Alliance, the YMCA, major health centers, and CDC-recognized lifestyle change program providers.
- **Obtaining high-level government support:** The chief medical officer of the CDPHE provided visible support of the National DPP, and state officials linked the National DPP to overall state health and wellness goals.
- **Making the business case:** The CDPHE worked closely with the Colorado Business Group on Health to make the business case for the National DPP and have recently piloted an economic analysis tool for employers that estimates the cost savings of covering the National DPP as a benefit.  
<https://www.colorado.gov/cdphe/ndpp-economic-tool>
- **Increasing awareness among providers and patients:** A range of communications and marketing strategies were used to educate consumers about the risks of prediabetes and the availability of the National DPP via health care providers, media outlets, local health departments, and nonprofit organizations focused on diabetes prevention.
- **Developing a robust referral and service provider network:** Colorado established a seamless referral system that included self-referral, provider referrals, and employer referrals to CDC-recognized lifestyle change programs and developed tool kits and other supportive materials for community-based organizations to become CDC-recognized providers.

## Opportunity for States

### Recent clarifications and recommendations related to The Affordable Care Act (ACA) open the door to expanding the National DPP to millions of people with prediabetes.

- The ACA requires non-grandfathered health insurance plans to cover without cost sharing all preventive services that have received “A” or “B” ratings from the US Preventive Services Task Force (USPSTF). The task force has released two recommendations with a B rating that encourage clinicians to refer high risk patients to programs such as the National DPP. The USPSTF recommends:
  - offering or referring adults who are overweight or obese and have additional cardiovascular disease (CVD) risk factors to intensive behavioral counseling interventions to promote a healthful diet and physical activity for CVD prevention.
  - screening for abnormal blood glucose (e.g. prediabetes) as part of a cardiovascular risk assessment in adults aged 40-70 who are overweight or obese and states that clinicians should offer or refer patients with abnormal glucose to intensive behavioral counseling interventions to promote a healthful diet and physical activity.
- The state Medicaid option to create health homes for chronically ill patients and other incentives for states to

prevent chronic illnesses among Medicaid beneficiaries can assist in making the National DPP lifestyle change program more available to those in need.

- The Centers for Medicare and Medicaid Services (CMS) further defined who is able to provide “preventive services” under Medicaid to include “other practitioners” when the services are recommended by a physician. States retain the authority to define practitioner qualifications, the preventive services to be provided, and the reimbursement methodology. The National DPP provides states with an easily-accessible and “off the shelf” strategy to determine these qualifications, services, and coverage.

### State public health officials can be valuable partners in efforts to expand the National DPP statewide.

Most state health departments have relationships with existing lifestyle change program providers and other interested partners, access to resources and experts that could support lifestyle change program providers, and expertise in promotion to communities and consumers, program planning, and evaluation to ensure success. In addition, they play a key role in promoting healthy environments, a necessary and complementary strategy to supporting people with prediabetes, such as menu labeling, trans fat elimination, increasing access to affordable fresh fruits and vegetables, and improving the walkability of communities.<sup>14 15</sup>

## References

1. Centers for Disease Control. National diabetes fact sheet: national estimates and general information on diabetes and prediabetes in the U.S., 2011. Atlanta, GA. 2011.
2. Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System. Deaths, Percent of Total Deaths, and Death Rates for the 15 Leading Causes of Death in 5-year age groups by race and sex. [http://www.cdc.gov/nchs/data/dvs/LCWK1\\_2010.pdf](http://www.cdc.gov/nchs/data/dvs/LCWK1_2010.pdf). Accessed August 19, 2015.
3. Centers for Disease Control and Prevention. Awareness of prediabetes – United States, 2005–2010. MMWR Recommen Rep. 2013;62:209–212. <http://www.cdc.gov/mmwr/pdf/wk/mm6211.pdf>. Accessed August 19, 2015.
4. Gerstein HC, Santaguida P, Raina P, et al. Annual incidence and relative risk of diabetes in people with various categories of dysglycemia: a systematic overview and meta-analysis of prospective studies. Diabetes Res Clin Pract. 2007;78(3):305–312.
5. Knowler WC, Barrett-Conner E, Fowler S, et al. Reduction in the Incidence of type 2 diabetes with lifestyle intervention or metformin. New England J Med. 2002;346(6):393–403.
6. Albright AL, Gregg EW. Preventing type 2 diabetes in communities across the US. The National Diabetes Prevention Program. Am J Prev Med. 44(4S4):S346–S351.
7. Vojta D, Koehler TB, Longjohn M, Lever JA, Caputo NF. A coordinated national model for diabetes prevention. Linking health systems to an evidence-based community program. Am J Prev Med. 44(4S4):S301–S306.
8. Ali MK, Echouffo-Tcheugui JB, Williamson DF. How effective were lifestyle interventions in real-world settings that were modeled on the diabetes prevention program? Health Affairs. 2012; 31(1):67–75.
9. American Diabetes Association. The Estimated Prevalence and Cost of Diabetes in Colorado website. [http://www.diabetesarchive.net/advocacy-and-legalresources/cost-of-diabetes-results.jsp?state=Colorado&district=0&DistName=Colorado+\(Entire+State\)](http://www.diabetesarchive.net/advocacy-and-legalresources/cost-of-diabetes-results.jsp?state=Colorado&district=0&DistName=Colorado+(Entire+State)). Accessed April 28, 2015.
10. Colorado Department of Public Health and Environment. Diabetes' Impact in Colorado. [https://www.colorado.gov/pacific/sites/default/files/DC\\_fact-sheet\\_Diabetes\\_Nov-2013\\_without-Appendix.pdf](https://www.colorado.gov/pacific/sites/default/files/DC_fact-sheet_Diabetes_Nov-2013_without-Appendix.pdf). Accessed April 28, 2015
11. McCracken K. (2015 February) Personal communication.
12. National Association of Chronic Disease Directors. State Diabetes Prevention Project; Stories of Success. [http://c.ymcdn.com/sites/www.chronicdisease.org/resource/resmgr/NDPP/NACDD\\_State\\_Stories\\_Final\\_9\\_.pdf](http://c.ymcdn.com/sites/www.chronicdisease.org/resource/resmgr/NDPP/NACDD_State_Stories_Final_9_.pdf). Accessed August 20, 2015.
13. United States Preventive Services Task Force. Behavioral Counseling for CVD Risk Reduction website. <http://www.uspreventiveservicestaskforce.org/Page/Topic/recommendation-summary/healthy-diet-and-physical-activity-counseling-adults-with-high-risk-of-cvd>. Accessed August 20, 2015.
14. Albright A, Devlin H. Integrating nutrition therapy into community-based diabetes prevention programs. In: Franz, MJ, Evert AB, eds. 2nd ed. American Diabetes Association Guide to Nutrition Therapy for Diabetes. Alexandria, VA: American Diabetes Association; 2012:501–526.
15. Andreyeva T, Long MW, Brownell KD. The impact of food prices on consumption: a systematic review of research on the price elasticity of demand for food. Am J Public Health. 2010;100(2):216–222.

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